Applying the Principles of the Strategic Plan to the Sacramento & San Joaquin River Basins Comprehensive Study

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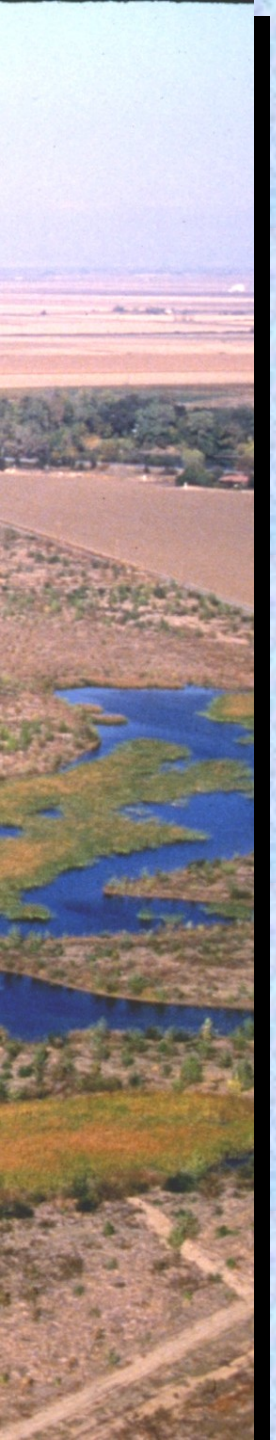
Flood Damage Reduction and Ecosystem Restoration



Concurrent Initiatives

- Civil Works Strategic Plan (2004)
- Watershed Principles (PGL #61) (1999)
- Environmental Operating Principles (2002)
- Sacramento & San Joaquin River Basin, CA, Comprehensive Study (1997-2003)

Study Area & Authorization

"....conduct a comprehensive assessment of the entire flood control system....development and formulation of comprehensive plans for flood control and environmental restoration purposes...."

1998 Energy and Water Development Appropriations Bill

What is the Central Valley?

- 3 hydrologic regions
- 450 miles long, 50 miles wide
- Highly productive and diverse agricultural area
- Important ecosystem
- 4.4 million people in study area
- Sac and SJ basins 43,000 sq-mi

Central Valley Flood Management System - Sacramento River Basin

- **5 major dams**
- **Control flows for about 100-year event**
- **Many unregulated tributaries**
- **Extensive levee and bypass system**
- **Complex hydraulics**
- **Year-round water supply**
- **Good riparian habitat in north**
- **Natural process constrained in the South**

Central Valley Flood Management System -San Joaquin River Basin

- **4 major dams**
- **Most are undersized for 100-year event**
- **Reservoirs on all major tributaries**
- **Intermittent levees**
- **Bypass system in southern half**
- **Less water than Sacramento River**
- **Serious depletion of habitat**
- **Complex water operations**

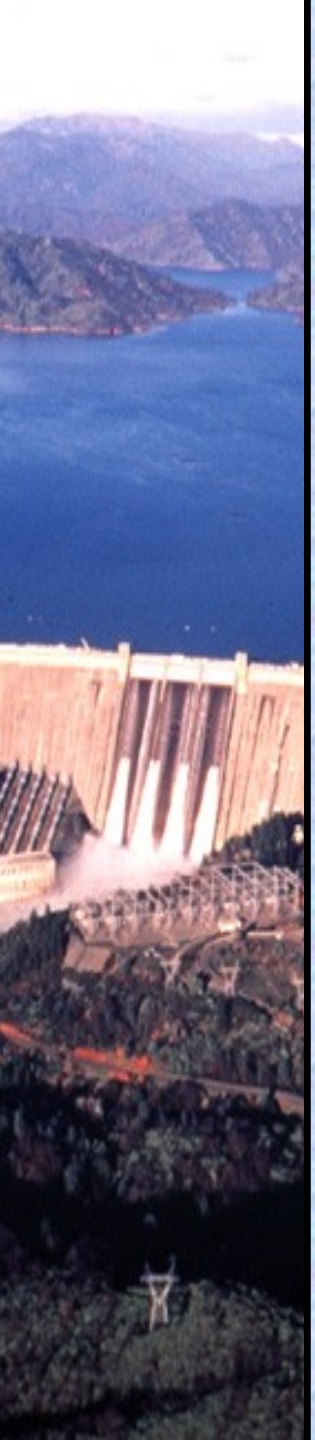
Traditional

Problems

- Inadequate Channel Capacity
- Levee Deficiencies
- Erosion
- Declining Habitat
- Threatened & Endangered Species
- Development within the Floodplains

Solutions

- Storage (in foothills & floodplains)
- Conveyance (through floodplain)
- Non-Structural (remove damages from floodplain
- Reconnect Floodplain with River
- Restore Native Habitat



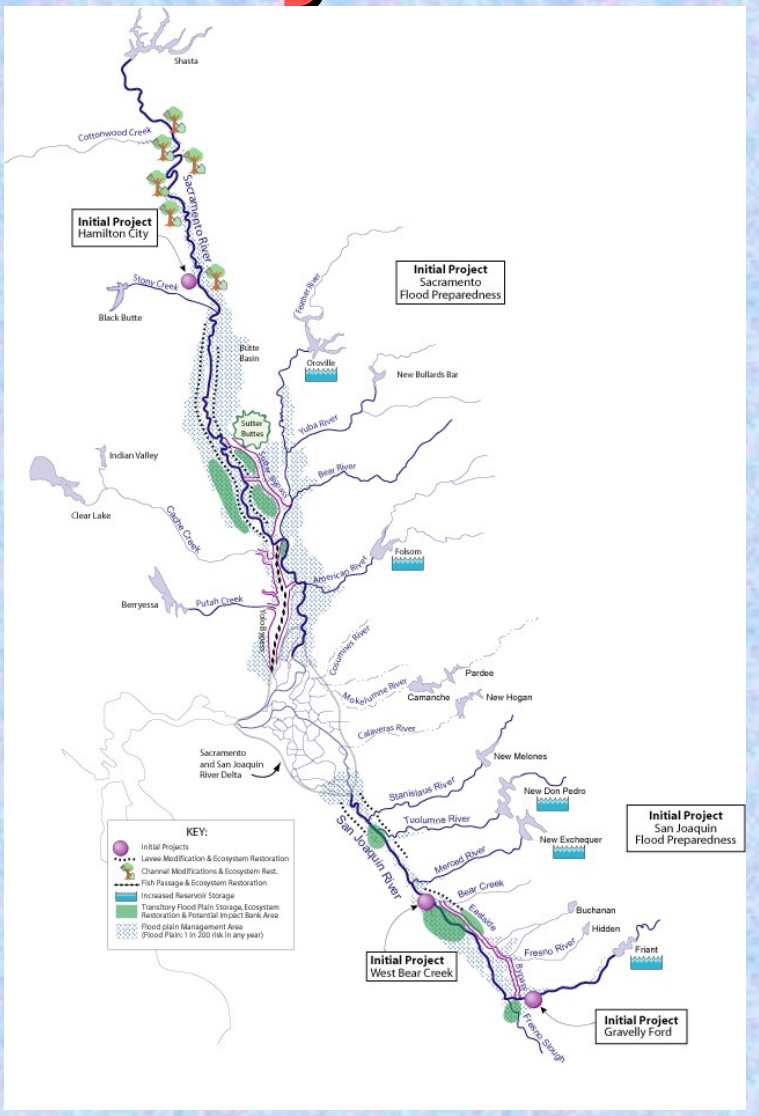
Biggest Challenge

Diverse Stakeholder Interests

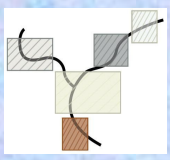
- Local Flood Control
- Water Users
- Environmental Interests
- Agricultural Industry

Needed to Refocus Study

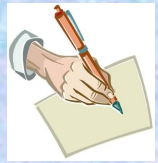
Physical Process



Guiding Principles



Approach for Project Development



Administrative Structur

Key Principles Are Essential

Watershed Principals

- Systems Approach
- Scope to Largest, Most Meaningful Level
- Balance economic, environmental, and social objectives
- Collaborative Approach

Strategic Plan

Integrated Water Resource Management

EOP's

- Environmental Sustainability
- Environmental Consequences
- Balance Development and Nature
- Corporate Responsibility/Accountability
- Integrate Scientific, Economic, & Social Knowledge Base
- Respect and Listen to Interest Groups

Guiding Principles

- Public Safety
- Floodplain Management
- Agriculture and Open Space
- Hydraulic and Hydrologic Impacts
- System Conveyance Capacity
- Sediment Continuity
- Ecosystem Approach
- Optimize Existing Facilities
- Integrate with CALFED and other Programs
- Multiple-purpose Projects
- Infrastructure

Key Lessons Learned

Scope

- Think big
- Start small with small bites that are more easily accepted

Systems Approach

- Necessary but threatening
- Provides the big picture but exposes warts
- Systems tools and models can reveal what works and what doesn't but can also make problems too hard and too expensive to tackle

Management

- Use Guiding Principles
- Use an administrative structure
- Actively seek collaboration
- Let people tell you what they need and want
- Manage expectations

Results

- Show early results
- Drive for a common vision
- Show results at a system, regional, and local levels

Bottom Line

Agree on principles up front

Let principles drive collaboration and scoping

Shared principles can lead to a shared vision

A shared vision has a better chance of leading to watershed success